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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,933	02/22/2002	Jianzhong Zhang	59864.00665	6502
32294 7590 01/23/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER CORRIELUS, JEAN B	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 01/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/080,933

Applicant(s)

ZHANG ET AL.

Examiner

Jean B. Corrielus

Art Unit

2611

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 21, 23-34, 36-38, 40-42.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☒ Other: Applicant's response has overcome the claim objection.


Jean B Corrielus
Primary Examiner
Art Unit: 2611

1-22-07

Applicant's arguments filed 1/5/07 have been fully considered but they are not persuasive. Applicant alleged that "the Examiner's interpretation is incorrect in that the decision unit 108 of Zangi cannot be interpreted as simultaneously being two different features of Applicants' claimed invention". However, it is noted that the rejection did read "decision device 108" on two different features of the applicant's claimed invention. Decision device 108, as noted in the last office action, rather is disclosed by Zangi as part of DFSE circuit see col. 3, lines 62-64 and further at col. 11, lines 8-12, Zangi clearly teach that the decision device is a MLSE device. Applicant further argued the Examiner incorrectly states that unit 108 is equivalent to both Applicants' DFSE and MLSE because "the cited features of Zangi are not structurally and functionally equivalent to Applicants' claimed features". As noted above, Zangi only discloses MLSE 108 as part of DFSE circuit (see above comment). In addition, no structural and functional difference can be seen between applicants claimed invention as recited in claim 21 and Zangi. Therefore, examiner maintains that Zangi anticipates applicant's claimed invention as recited in claim 21. See office action for details. It is the applicant's position that signal estimator 122 as disclosed by Zangi is in communication with a sampler as oppose to a "signal filter". Examiner disagrees. Note that the signal is first process by a receive filter before being provided to the sampler see col. 3, lines 45-47. Since the signal estimator is in communication with the sampler, it is also in communication with the signal filter feeds the signal estimator 122 via the sampler circuit. Applicant further argues that "the Examiner's allegation that "signal optimizer 124" is in communication with the "signal filter" since it receives output from the "estimator 122 to calculate the coefficients" is insupportable because element 124 of Zangi is actually an adaptive algorithm that cooperates with the channel estimator 122 in the processor 120". However, it is noted that such comment is consistent with Zangi that clearly teach estimator 122 receives a signal from a "receive filter" through the sampler circuit see col. 3, lines 46-51, col. 4, line 57-col. 5, line 25. It is also asserted that "in view of the description provided in Zangi and Taylor, Applicants would point out to the Examiner that there is no motivation or suggestion to combine Taylor and Zangi. While the presently claimed invention is related to a Multiple-Input, Multiple-Output (MIMO) communication system, neither Taylor nor Zangi appears to be related to a MIMO communication system". However, it is noted that proper motivation is provided as to why one skill in the art would have combined Zangi and Taylor (see office action). It is the applicant's position that the "demodulator" of Taylor is not equivalent to the MLSE circuit as claimed. However it is noted that both the demodulator of Taylor and the MLSE circuit of applicant claimed inventions functions to provide an output to the deinterleaver circuit. Hence the demodulator of Taylor is functionally equivalent to the claimed MLSE circuit. It is alleged that Malkemes does not disclose a DFSE circuit having the configuration as recited in claim 21. However, it is noted that Zangi teaches the feature of the DFSE circuit as recited in the claim(s). It is further alleged that the combination of Zangi and Malkemes is improper without motivation to combine the references. However, it is noted that proper motivation is provided in the office action to combine the references.